

Draft Criteria for Conceptual Design and Feasibility Study— Silver Bow Creek Restoration Plan

Purpose: to provide the Butte community with a conceptual design and feasibility study that will validate EPA's assertion that the proposed BPSOU plan for a storm water detention pond system in the Upper Silver Bow Creek Corridor "will not preclude the development of a restored meandering Silver Bow Creek" as envisioned in Restore Our Creek Coalition's (ROCC) *Silver Bow Creek Headwaters Park* plan.

This requires engaging an independent contractor with expertise in stream restoration, design, and construction and a familiarity with Butte's Superfund remedial and restoration circumstances, to conduct a thorough conceptual design and feasibility study to confirm the assertion stated above. The contractor will work from, but not be limited to, a conceptual design previously prepared by ROCC and will consult regularly with ROCC to ensure that the resulting design comports with the vision embodied in the *Silver Bow Creek Headwaters Park* plan. This effort by the independent contractor will produce results that can be integrated with the BPSOU CD process and meet the following criteria:

1. Time Frame. The study must be fast-tracked for completion in time to be incorporated into the final BPSOU CD decision documents which are currently projected for August 2019.
2. Remedy Compatibility. The study must account for how the proposed meandering lined creek can be constructed so as to be compatible with the planned storm water control features in the BPSOU CD and also with the Natural Resource Damage Parrot Tailings restoration project and other activities from Texas Avenue to Montana Street.
3. Documentation. The study will provide a detailed survey of the proposed restored lined creek channel from Texas Avenue to the confluence with Blacktail Creek that accounts for property ownership, easements, infrastructure, and elevations.
4. Scope and Scale of Restored Creek.

- a. The design of the lined creek will ensure that currently contaminated groundwater beneath the planned creekway will have no contact with the clean water flowing along the restored creek until such time that the lining is no longer needed.
- b. The restored lined creek will rely on gravity flow of the stream from the point where its source enters the channel at Texas Avenue to the point where it meets Blacktail Creek near the Chamber of Commerce.
- c. The study will size the restored creek channel to accommodate anticipated future flows from mandated water treatment discharge demands and other available waters with a target of no less than the average daily flow of Blacktail Creek.
- d. The study will align the creek's channel to optimize its meandering character within the land corridor set aside for the creek by ARCO/BP (from Casey Street through the Northside Tailing and the Diggings East) and Butte Silver Bow (from Texas Avenue to Harrison Avenue) and also along the corridor from Harrison Avenue to Casey Street.
- e. The study will identify infrastructural challenges along the creek route/alignment, including crossings of streets, roads, walking paths, pipelines and the existing Silver Bow Creek channel, and provide preliminary design options to resolve the challenges.
- f. The study will identify private land issues along the route/alignment to facilitate later purchase or easement opportunities and will provide design options to accommodate private property as much as possible.

5. Costs. The study will estimate costs associated with construction of the restored lined creek (-10% to +25%), including cost-mitigation measures that can be factored into plans underway for storm water-control construction activities throughout the corridor.